

IN THE MATTER OF APPLICATIONS 53987 THROUGH 53992 AND 54003 THROUGH 54021 FILED BY THE SOUTHERN NEVADA WATER AUTHORITY TO APPROPRIATE GROUNDWATER IN SPRING VALLEY, CAVE VALLEY, DRY LAKE VALLEY AND DELAMAR VALLEY

**EskDale Center
1100 Circle Drive
EskDale, Utah 84728**

Protestant to SNWA Applications 54003 through 54021 for Groundwater in Spring Valley, Nevada.

Closing Statement

EskDale Center represents the interests of EskDale Community and its associated agricultural activities located in Snake Valley in western Millard County, Utah. Snake Valley's groundwater resources are shared by the states of Nevada and Utah.

EskDale Community is not likely to be directly affected by removal of groundwater from Spring Valley from the specific points of diversion specified in these applications. However, these applications are part of a larger overall Groundwater Development Project being pursued by SNWA in other valleys, including Snake Valley. The information, analysis, proposed removal plans and methods, and conditions and restrictions placed on any rights granted by the Nevada State Engineer will set precedents for similar consideration of applications already filed by SNWA in Snake Valley.

This project in its totality has the potential to affect to impact EskDale's limited groundwater supply over the long term withdrawal of the groundwater quantities in their applications. Therefore, EskDale requests consideration of its concerns related to all aspects of the information presented in these hearings.

EskDale Center believes that the information and arguments presented in support of these applications are not sufficient to warrant granting of the water applied for in terms of need to export from this basin, environmental soundness in the basin of export, or limitations on future growth in the basin of export.

EskDale Center further believes that the proposed removal of the water applied for represents water mining, since the analysis of its removal over long periods of time indicates that groundwater levels do not reach equilibrium.

EskDale Center also believes that the Groundwater Withdrawal Project represents a significant future liability to the importing basin, both in terms of economic commitments and related impacts on consumer rates, as well as environmental liability for the basis of origin as is currently being experienced by Los Angeles DWP for their removals in Owens Valley, California.

For such reasons, EskDale Center believes the applications should be rejected as submitted.

Justification of Need

The “need” for additional water in SNWA’s service area is principally caused by the legal limits of withdrawals from the Colorado River by the Colorado River Compact negotiated in 1922 and signed by the State of Nevada. Sufficient access is available to this resource if it were allowed. Recently completed agreements with the Upper Basin states provide for transfers of water to Lake Mead to ensure adequate access. SNWA claims that the GWD project is to be “on the shelf” but not operated until “needed”. The inherent vagueness of this approach suggests that a need is not well-defined, but rather a longer term uncertainty.

Unfortunately, assuaging this uncertainty requires water rights in Spring Valley and other basins to be permanently assigned for export. The supposed “need” will quickly become a “right”—a planning quantity, initially incited by perceived lower operating costs. The concept of eastern Nevada groundwater as protection against drought has completely disappeared in SNWA resource planning. However, the possibility that groundwater withdrawal from that area might not be reliable or sustainable was not incorporated into the resource planning scenarios, either.

In fact, a minimum project size to meet “need” has never been established, either to meet forecasted usage in Southern Nevada, or to demonstrate at what capacity the GWD project is economically feasible. In the DEIS process, water rights from other valleys were adjusted to produce the initial total amount when the first Spring Valley hearings limited the amount to less than originally expected. The “need” expressed in these hearings has always been “everything we can get our hands on”. These water rights are more speculative than necessary.

Specifically, the projections and forecasts presented in this hearing were hasty revisions of SNWA’s 2008/2009 Water Resources Plan. They did not account for the rapidly changing population trends and economic forecasts in Southern Nevada. In fact, the 2010 Census data was not included. The economic climate in Southern Nevada has been fundamentally changed by the housing market collapse, unemployment and related population declines, and the flight of entertainment capital to other areas. This analysis should be redone to reflect the latest economic and demographic information available if this “need” is to be credible, and should be based on conservative assumptions rather than the hopes of economic development salesmen.

Precluded Future Technology

SNWA’s Resource Plan depicts the water from the GWD as the long-term resource above that from the Colorado River allocation. Of necessity, then, it becomes the priority for long-term investment, and commits SNWA to its funding and operation. This limits SNWA’s opportunity for large-scale investment in new technology when it becomes available. This unduly commits Spring Valley groundwater resources in favor of a short-sighted “quick fix” approach which limits Southern Nevada’s future technology options.

Environmental Soundness in Spring Valley

The objective of SNWA’s pumping program is to remove the groundwater represented by ET (evapotranspiration). The points of diversion (POD’s) specified in the applications being considered do not provide adequate access to the ET areas directly, so the entire

groundwater resource is affected by the attempt to lower the water table below the phreatophytic root zone. This unnecessarily impacts springs and existing water rights around the removal areas.

SNWA has been more concerned about preserving the priority date in their applications than about producing a credible plan to meet the objective of capturing ET effectively. In order to capture ET, they must extract the water from the ET areas. Without this approach, they will only produce water level drawdown impacts in the Spring Valley basin without capturing ET completely. Their proposed pumping program results in water mining because it does not target the desired component of the water budget. SNWA should not be allowed to remove water not associated with ET. The ineffectiveness of their approach should not be the burden of existing rights holders, springs, or other environmental constituents.

GBWN and CPB analysis indicates that smaller quantities of groundwater removal (20-30,000 AFY) produce significant drawdown impacts using these POD's. These applications should be rejected in favor of changes to POD's which can achieve the desired result of capturing ET before reconsideration. This would include pumping from areas and depths competitive with the ET species. This approach would also make SNWA's withdrawals more equitable with existing water rights holders, as they would suffer the same impacts from a lowered water table. Springs would be more adequately protected, since POD's would not be in the spring locations and their source areas.

Species transition and plant community changes caused by lowering water levels are theoretical in Spring Valley. There is no assurance that such transitions will occur, and that they will be effective in preserving or fostering plant health and soil conservation in these soil types. Scientists and professors would love to use Spring Valley as an experiment, but eastern Nevada and western Utah cannot afford an Owens Valley Test Site for these theories.

Impacts from pumping in Spring Valley will be persistent, on the order of hundreds of years. Projections indicate that affected areas farther from the recharge zones will never recover to their original levels, especially if forecasted subsidence has occurred. Springs, especially those with smaller flows, do not regenerate when water levels recover. This proposed program has all the characteristics of water mining as currently proposed.

Environmental soundness must be considered in the context of this project's duration. Any water rights will be granted in perpetuity, and the span of this project and its impacts is in the 100-500 year time frame. Any changes in the ecology and environmental characteristics of Spring Valley will be permanent for all intents and purposes, and there will be no effective chance to change course once significant impacts are observed. EskDale urges extreme caution in decisions affecting springs and plant communities.

Growth Limitations in Spring Valley

SNWA portrayed Spring Valley (and rural Nevada and Utah in general) as places no one would want to invest in, or that had any practical future value. However, Las Vegas was such a place in the early 1900's. It was water that made growth possible in Southern Nevada, and it is not unreasonable to foresee population and economic growth in Spring

Valley's future given the availability of land, communication, transportation, and other infrastructure. Las Vegas has developed over about the same time period as this project's initial phase (75-100 years), and Spring Valley is not remote or inaccessible in today's economy.

Future opportunities in Spring Valley are far more limited by the presence of SNWA itself than by any other factor. SNWA has acquired the most productive agricultural resources in Spring Valley because of their water rights, and then proved itself to be inept at agriculture, which would be expected of a municipal utility. The existing productivity of Spring Valley has declined because of their presence. This will be true of the groundwater as well if SNWA is granted the preponderance of groundwater rights in Spring Valley. Without an incentive for efficiency or productivity, Spring Valley will not even be what it once was, much less improve its capability. Granting the available water in Spring Valley to SNWA guarantees no future, and makes SNWA's assertions a self-fulfilling prophecy.

Uncertainty

Uncertainty is pervasive in the analysis done in support of these applications. Estimates, assumptions, and statistical methods were used to present a single value in support of SNWA's desired result. However, the ranges of values associated with uncertain geology, hydrology, and meteorology (to name a few) were not presented as part of a combined analysis of possibilities. Such ranges must be evaluated, and the lower limits must be used in a conservative approach to avoid irreversible impacts from over pumping.

It is interesting to note that all the estimates from previous studies are statistically acceptable, and that SNWA's selected values, while more detailed and experimental, are not statistically preferable to other work done.

Uncertainty about the hydrogeologic connections between Spring Valley and Snake Valley is of particular concern for EskDale, since these connections would directly affect the contribution to Snake Valley's groundwater from Spring Valley. These flows must be understood both to avoid impacts to connected groundwater resources and to properly evaluate the groundwater resource in Spring Valley. The largest values for possible flows of groundwater in areas which are not understood should be withheld from any available water in the basin.

No Definition of Project Duration

Much of the impact analysis presented by all parties attempts to address the drawdown impacts over long periods of time, because no project duration is specified. Without such definition, each affected party must make its own assumptions. However, it also has allowed SNWA to play a sort of "shell game", where any particular analysis can be disarmed or discounted by claiming an operating scenario which avoids the affected area. This is further indication that this plan is speculative, hypothetical, and in fact not the project plan SNWA intends to ultimately implement. The DEIS for the Lincoln County pipeline ROW clearly indicates this to be the case. These applications should be rejected as not being supported by the plans submitted to remove the water.

Impact on Existing Rights

Granting rights to the preponderance of available groundwater in Spring Valley based on these applications gives SNWA preferential access to this shared resource. The ability to pump at greater depths than current users ensures water availability to SNWA, a benefit not available to existing groundwater users. All impacts will be borne by other rights holders rather than by SNWA. In addition, SNWA already has greater access and influence with the State Engineer due to their political presence and financial resources. In cases covered by the Stipulated Agreement, rights holders not party to the agreement have no standing, and must make their own case to the State Engineer.

“Available groundwater” should not include the so-called “uncommitted” portion of existing rights, nor should it ever include any portion of domestic rights. Water rights granted in the past must be respected. If the State Engineer decides to pursue a “use it or lose it” policy in Spring Valley, then existing rights will be adjusted based on its determinations, but SNWA should have no claim to any portion of existing rights by such a spurious argument.

As noted previously, groundwater applications based on ET capture should be conditioned by the effectiveness of actually capturing ET. It is unacceptable to claim ET as available and then promote an extraction method which does not actually capture ET. To do so creates an imbalance in the water budget and results in the water mining revealed in the analysis of the Spring Valley applications. If effective capture cannot be achieved, then the inefficient portion of ET capture should be reserved or removed from the water budget.

Allowing rights to groundwater based on ET capture which do not actually and effectively capture ET makes other existing rights holders and users (such as springs and wildlife) pay the penalty for over allocation. SNWA should not be the last party to be affected by their own actions.

Conclusion

SNWA’s pursuit of the Spring Valley applications has consistently exhibited two criteria:

1. Preservation of the 1989 priority date of the original LVVWD applications, and
2. A claim for all available water in the basin.

This approach has caused them to submit a plan which does not support their applications—capturing ET from the applications Points of Diversion. This plan results in water mining and inefficient removal of the groundwater over very long time periods. Their approach also produces irreversible impacts to the Spring Valley Basin. It is very clear that SNWA does not intend to implement the extraction plan in the manner submitted, but only to use this process to acquire rights to the groundwater, and then submit change applications in the future. This is a subversion of the process and places additional burdens on those affected by such applications.

Had SNWA filed change applications or new applications with POD’s which reflected an actual plan, they would have risked less than 2500 AFY by priority date (according to the Stanka water rights analysis report), and would have reflected an understanding that Spring Valley groundwater is a resource to be shared, not one to be conquered.

These applications should be rejected as being inadequate to support the quantities of groundwater applied for, as water mining, and for creating unacceptable long term environmental impacts in Spring Valley. Evaluation of these rights should not be a question of determining “how much”, but an effort to understand “if” and “how” before water is removed from Spring Valley.

In addition, the project as described is speculative, without definition of a specific need or a specific time frame of operation. This is inconsistent with the granting of perpetual rights of this magnitude, which would eliminate future development in Spring Valley.

There is sufficient uncertainty in both the analysis presented and the information available to adequately understand the groundwater resource in Spring Valley to require further investigation and analysis by SNWA prior to granting any groundwater rights under these applications. These applications are of such magnitude and the project of such long term that the elimination of all possible uncertainty is essential, particularly given the example of LADWP’s similar actions in Owens Valley, California.

EskDale Center is also very concerned about the “adaptive management” approach proposed by SNWA. Such a process is only applicable to responsive environments where sufficient understanding of the foundational processes exists, and is used for incremental adjustments. These characteristics do not exist in the Groundwater Development Project, where initial impacts are years or decades away, and long-term impacts are projected to be irreversible. Although the concepts and theories are attractive, they only contribute to the desire to “try it and see how it works”, which cannot avoid long-term issues in this case. More likely this approach will be used to mask impacts until they can no longer be hidden as the groundwater resource declines generally.

These water rights will span the careers of many future State Engineers and departments, as well as many administrations of Southern Nevada Water Authority. Provisions and protections will be very difficult to add to these rights after their initial approval. Political, economic, and climate issues will continue to pressure the groundwater resource in Spring Valley. We urge the State Engineer to adequately and effectively condition and restrict the development and operation processes beyond those contained in the Stipulated Agreement negotiated by SNWA with the Federal agencies and the basic statute provisions contained in the NRS. We are very concerned about the precedents related to the issues about these applications, both by what is included and by what is omitted.

EskDale Center appreciates the opportunity to express its views and concerns about these applications for groundwater in Spring Valley and their potential impacts on one of Nevada’s significant natural resource areas where we are neighbors.

God bless you with wisdom and strength as you consider these applications.